

MICHIGAN JUDGES'
RETIREMENT SYSTEM

PENSION PLAN REVIEW

May 15, 2008



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Chief Investment Officer, Bureau of Investments



- Mission, Goals, Objectives
- MJRS Membership
- Markets and Economics
- Rates of Return
- Investment Holdings
- Diversification



Bureau of Investments

Mission Statement



The Bureau of Investments provides quality investment management services, professional expertise, and advice to the State Treasurer as fiduciary of the State of Michigan Retirement Systems and Michigan boards and agencies. The Bureau strives to provide consistent and cost-effective management of funds to achieve competitive investment returns that meet objectives within an acceptable level of risk for the benefit of employees, retirees, and citizens of the State of Michigan.



State of Michigan Retirement Systems

Investment Goals

- ***Meet or exceed actuarial assumption over the long term.***
- ***Maintain sufficient liquidity to pay benefits.***
- ***Achieve optimal rate of return possible with prudent levels of risk.***



State of Michigan Retirement Systems

Investment Objectives

- *Diversify assets to preserve capital and avoid large losses.*
- *Perform in the top half of the public plan universe over the long term.*
- *Exceed individual asset class benchmarks over the long term.*
- *Operate in a cost-effective manner relative to peers.*



Member Information





Plan Membership

September 30, 2007

MEMBER TYPE	MJRS
Retirees & Benef. Receiving Benefits	542
<i>One-Year Change</i>	9
Current Employees Vested	259
Current Employees Non-Vested	1
Active Members Total	260
<i>One-Year Change</i>	-31
Inactive Employees Entitled To, But Not Yet Receiving Benefits	16
Total MJRS Members	818
<i>One-Year Change</i>	-22



Plan Membership Ratio

September 30, 2007

Ratio of Active/Retiree	MJRS
Year 2007	.48:1
Year 2006	.55:1
Year 2005	.59:1
Year 2004	.59:1
Year 2003	.61:1

MJRS is a closed system so that new employees are members in a defined contribution plan.

Source: Pension Plans Component Unit Financial Reports Fiscal Year Ended September 30, 2007



Funded Ratio

September 30, 2007

Year	Market Value of Assets*	Actuarial Value of Assets*	Actuarial Accrued Liability*	Funded Ratio Based on Actuarial Value
2007	\$336	\$301	\$247	121.9%
2006	\$303	\$283	\$244	116.0%
2005	\$284	\$278	\$243	114.4%
2004	\$268	\$287	\$236	121.6%
2003	\$255	\$292	\$235	124.3%
1980	\$ 37	\$ 37	\$ 57	64.9%

*(\$ in Millions)

Source: Pension Plans Component Unit Financial Reports and Actuarial Valuations



Markets and Economics





Stock Market Environment

Market	2007 Price Change	12/31/07
DJIA	+6.43%	13,265
S&P 500	+3.53%	1,468
NASDAQ	+9.81%	2,652
BMI-EPAC (Local)	+1.40%	254.3
BMI-EPAC (USD)	+8.63%	317.7



First Quarter Stock Market Update

Market	1 st Qtr. 08	
	Price Change	3/31/08
DJIA	-7.55%	12,263
S&P 500	-9.92%	1,323
NASDAQ	-14.07%	2,279
BMI-EPAC (Local)	-15.00%	216.2
BMI-EPAC (USD)	-9.35%	288.0



Bond Market Environment

Market	2007 Yield	
	Change	12/31/07
30-Year Treasury	-36 bp	4.45%
10-Year Treasury	-67 bp	4.03%
5-Year Treasury	-123 bp	3.46%
2-Year Treasury	-174 bp	3.07%
13-Week T. Bill	-188 bp	3.17%
Fed Funds	-100 bp	4.25%



First Quarter Bond Market Update

Market	1 st Qtr. 08	
	Yield Change	3/31/08
30-Year Treasury	-16 bp	4.29%
10-Year Treasury	-61 bp	3.41%
5-Year Treasury	-100 bp	2.44%
2-Year Treasury	-157 bp	1.48%
13-Week T. Bill	-192 bp	1.33%
Fed Funds	-200 bp	2.25%

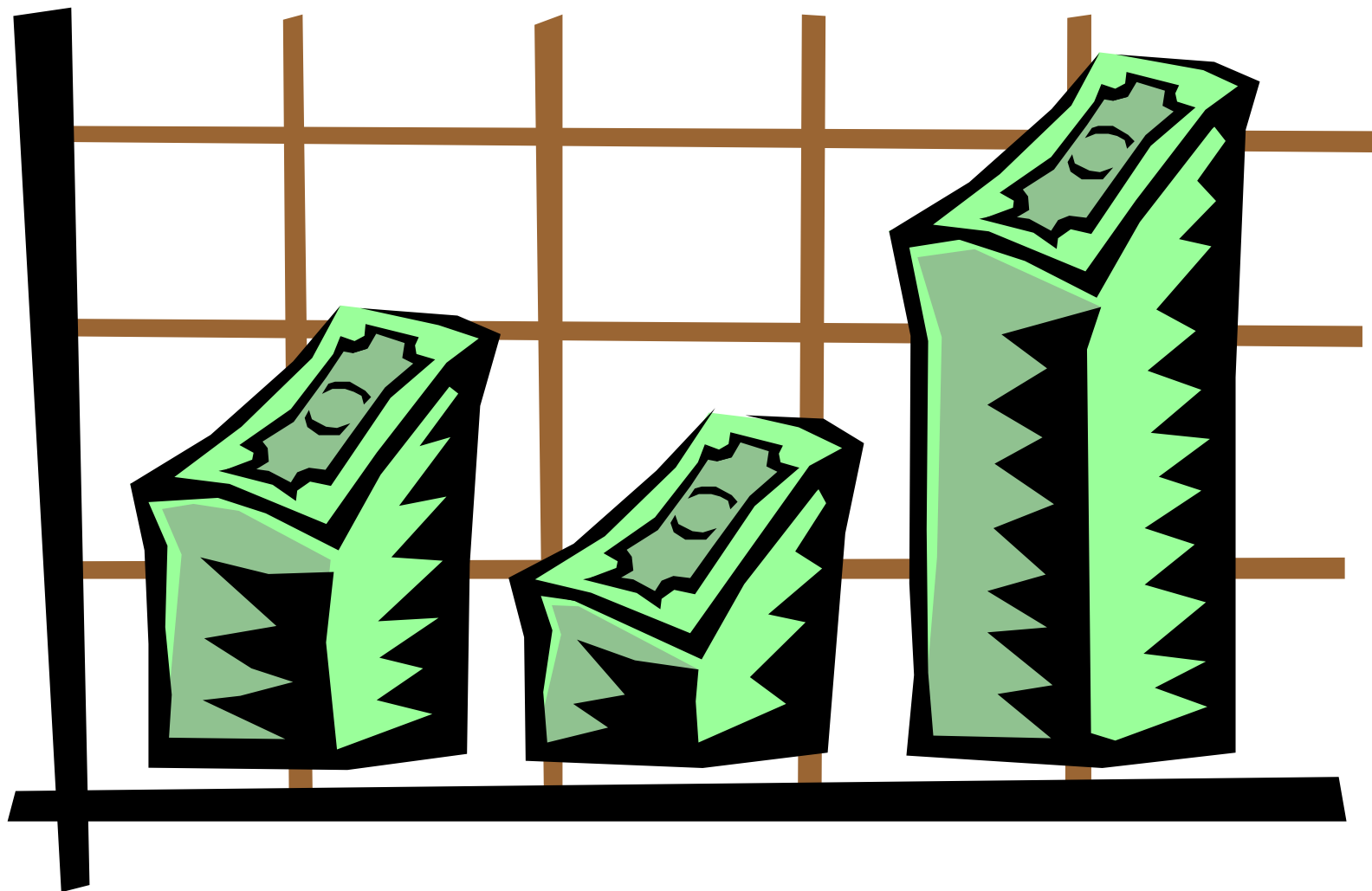


Economic Environment

- **GDP averaged 2.2 percent in 2007. Will slow for 2008.**
- **Inflation (CPI) of 3.7 percent.**
- **Job growth and employment remained low.**
- **Excluding the financial sector, corporate earnings & balance sheets remain strong.**
- **Federal Reserve has continued to ease.**
- **Merger & acquisition has slowed.**
- **\$100+ per barrel oil.**
- **Deflating housing market, subprime vs. prime mess?**



Return On Investments





Time-Weighted Rates of Return

Asset Class w/Benchmark	FY07		CY07	
	Rate	Rank	Rate	Rank
Total Plan	17.0%	31	11.0%	9
Median*	15.9%		8.6%	
Domestic Equities	16.7%		5.4%	
S&P 1500 Index	16.6%		5.5%	
International Equities	22.1%		9.4%	
S&P/CitiGroup BMI-EPAC**	19.8%		7.3%	
Private Equity	30.7%		34.0%	
S&P 500 + 300 b.p.	19.6%		8.7%	

*State Street Universe of Public Funds > \$1 Billion

** (1/2 USD & 1/2 LC)

Source: State Street Analytics



Time-Weighted Rates of Return

Asset Class w/Benchmark	FY07		CY07	
	Rate	Rank	Rate	Rank
Real Estate	20.5%		21.8%	
NCREIF (NPI minus 75 b.p.)	16.0%		14.5%	
Bonds	5.8%		8.0%	
Lehman Gov't/Credit	5.1%		7.2%	
Cash Equivalents	5.4%		5.4%	
30 Day T-Bill	4.9%		4.6%	

Fiscal Year – 10-Year Annualized Return

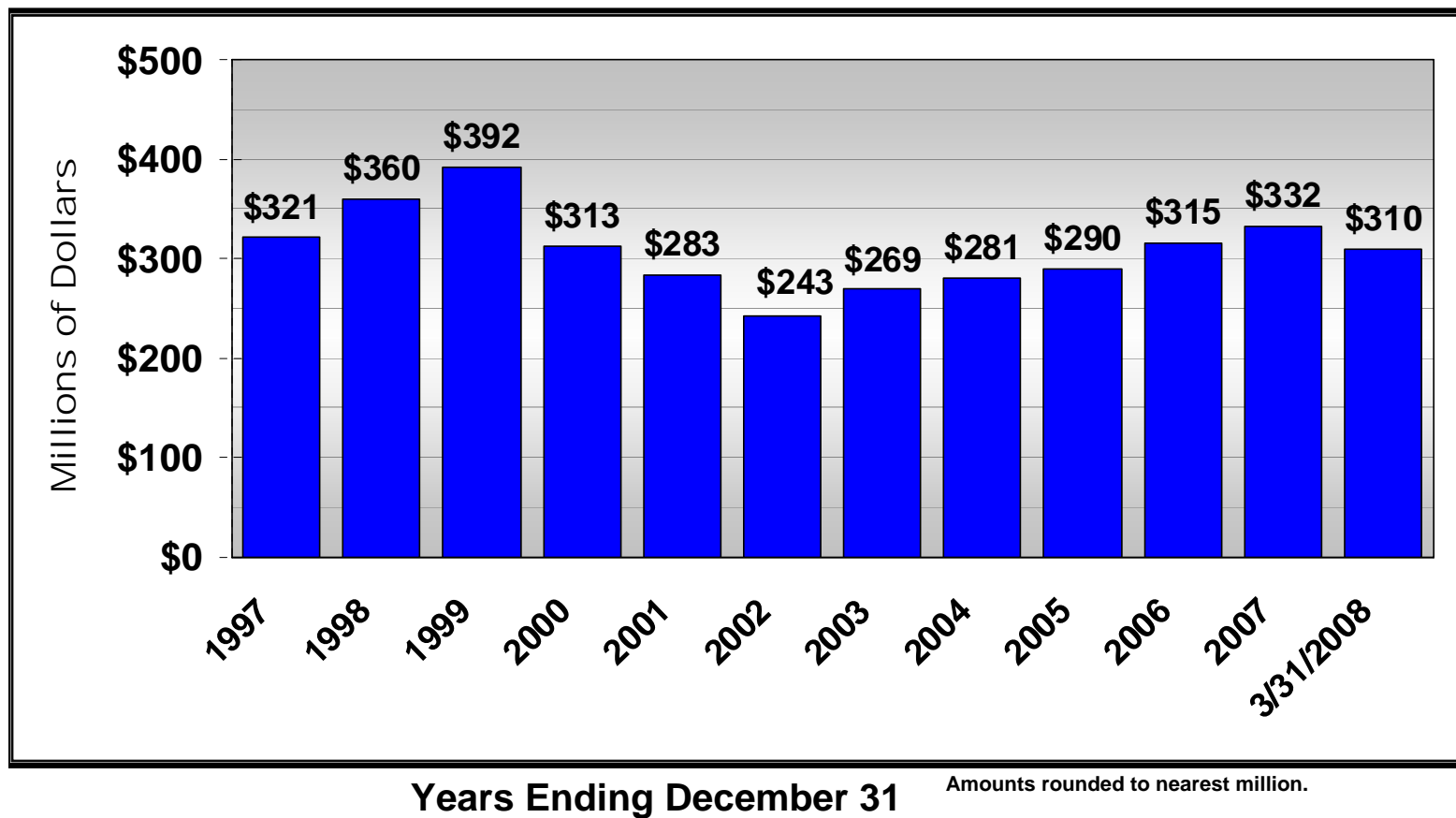
Rate: 8.1% - Rank: 54

Source: State Street Analytics



Market Value

\$310 Million





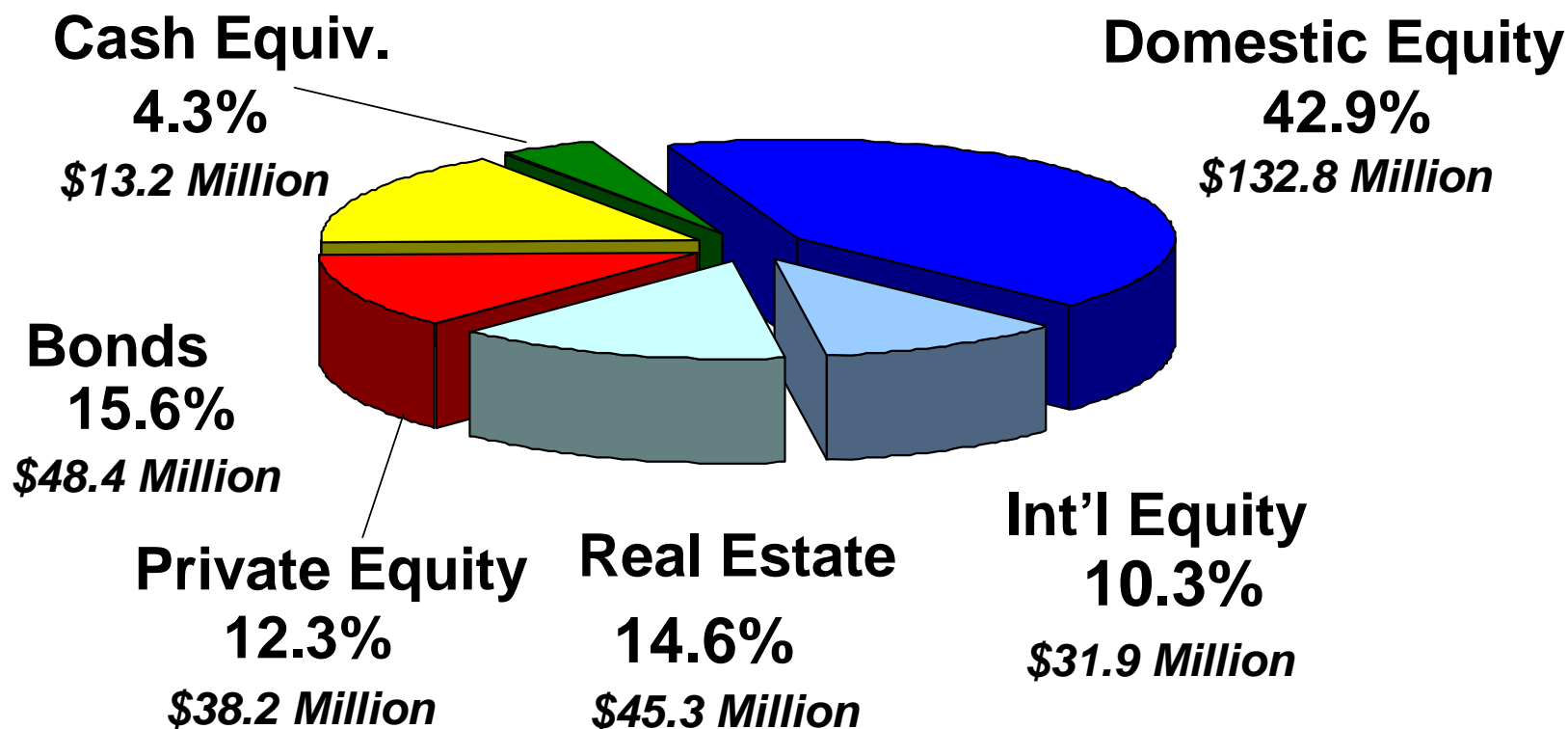
Investment Holdings





Asset Allocation

\$309.8 Million

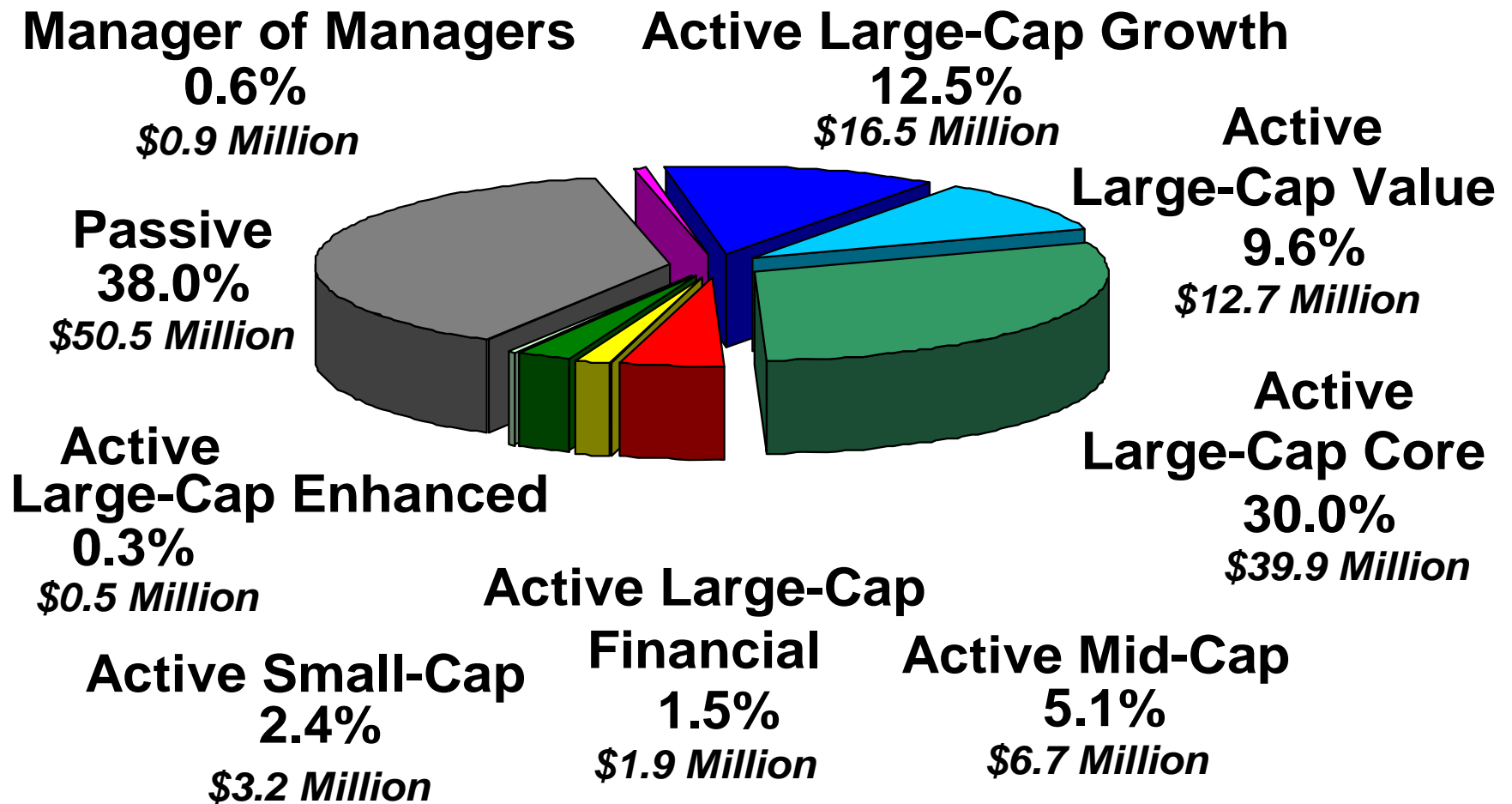


Market Value as of March 31, 2008



Domestic Equity

\$132.8 Million

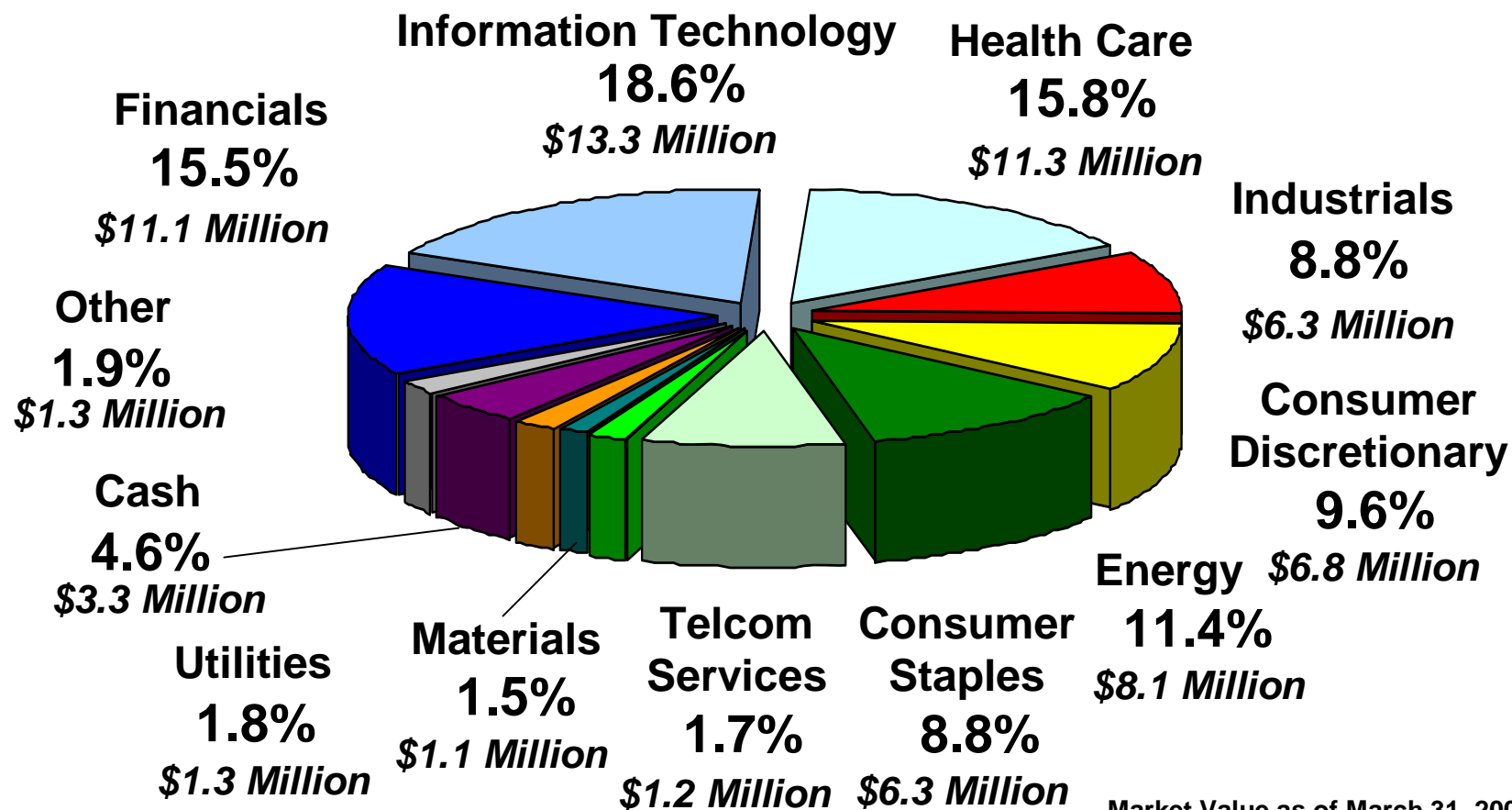


Market Value as of March 31, 2008



Domestic Active Equity Large-Cap Investments

\$71.4 Million



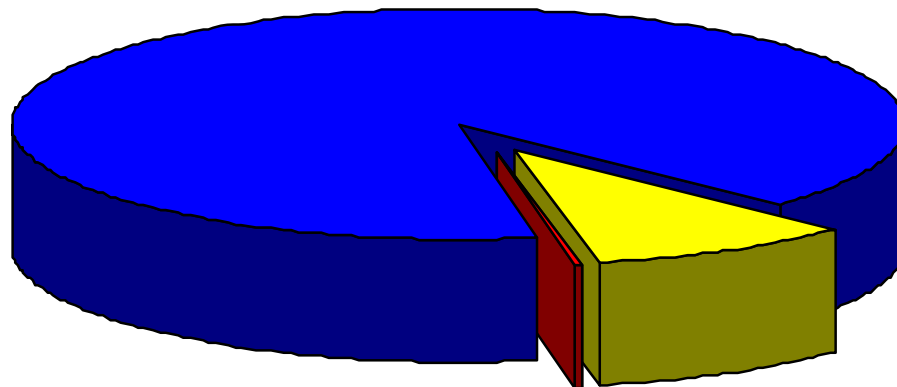
Market Value as of March 31, 2008



Domestic Passive Equity

\$50.6 Million

S&P 500
90.0%
\$45.5 Million



Cash
0.4%
\$0.2 Million

S&P Mid-Cap
9.6%
\$4.9 Million

Market Value as of March 31, 2008



International Equity

\$31.9 Million

Active Funds

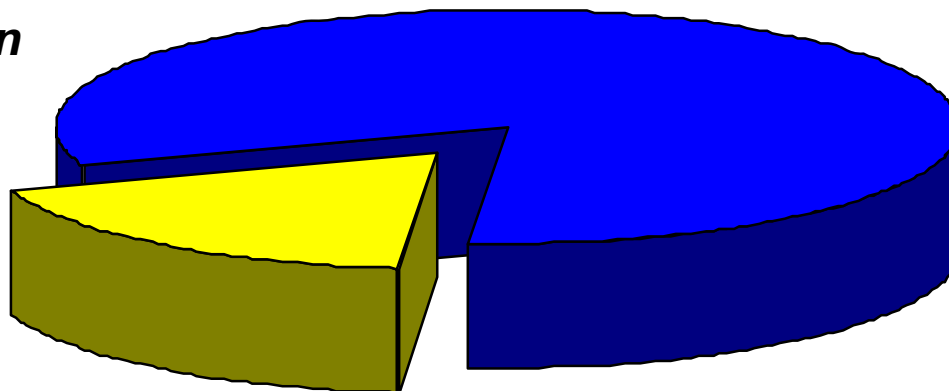
26.3%

\$8.4 Million

Passive

73.7%

\$23.5 Million

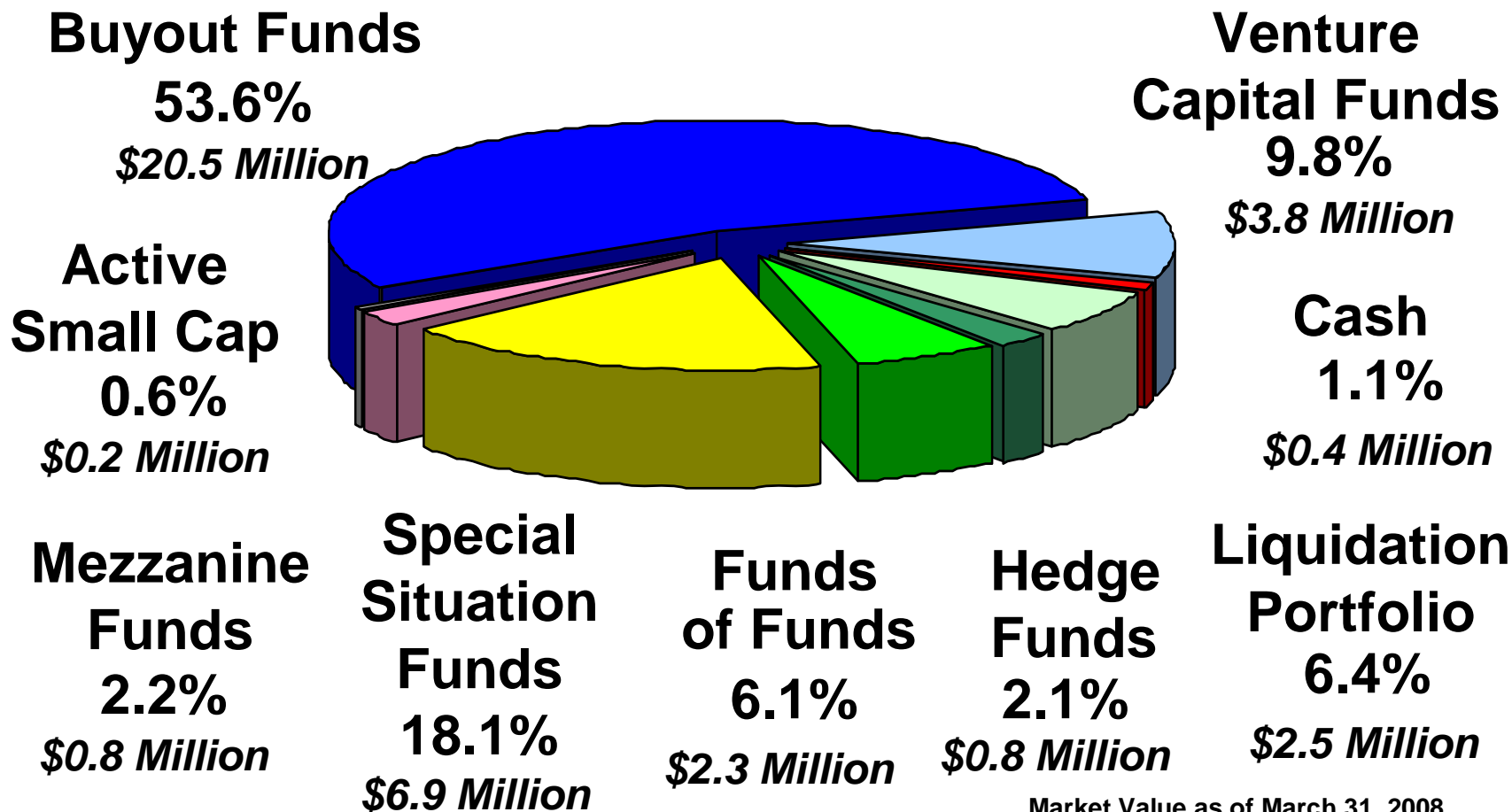


Market Value as of March 31, 2008



Private Equity

\$38.2 Million

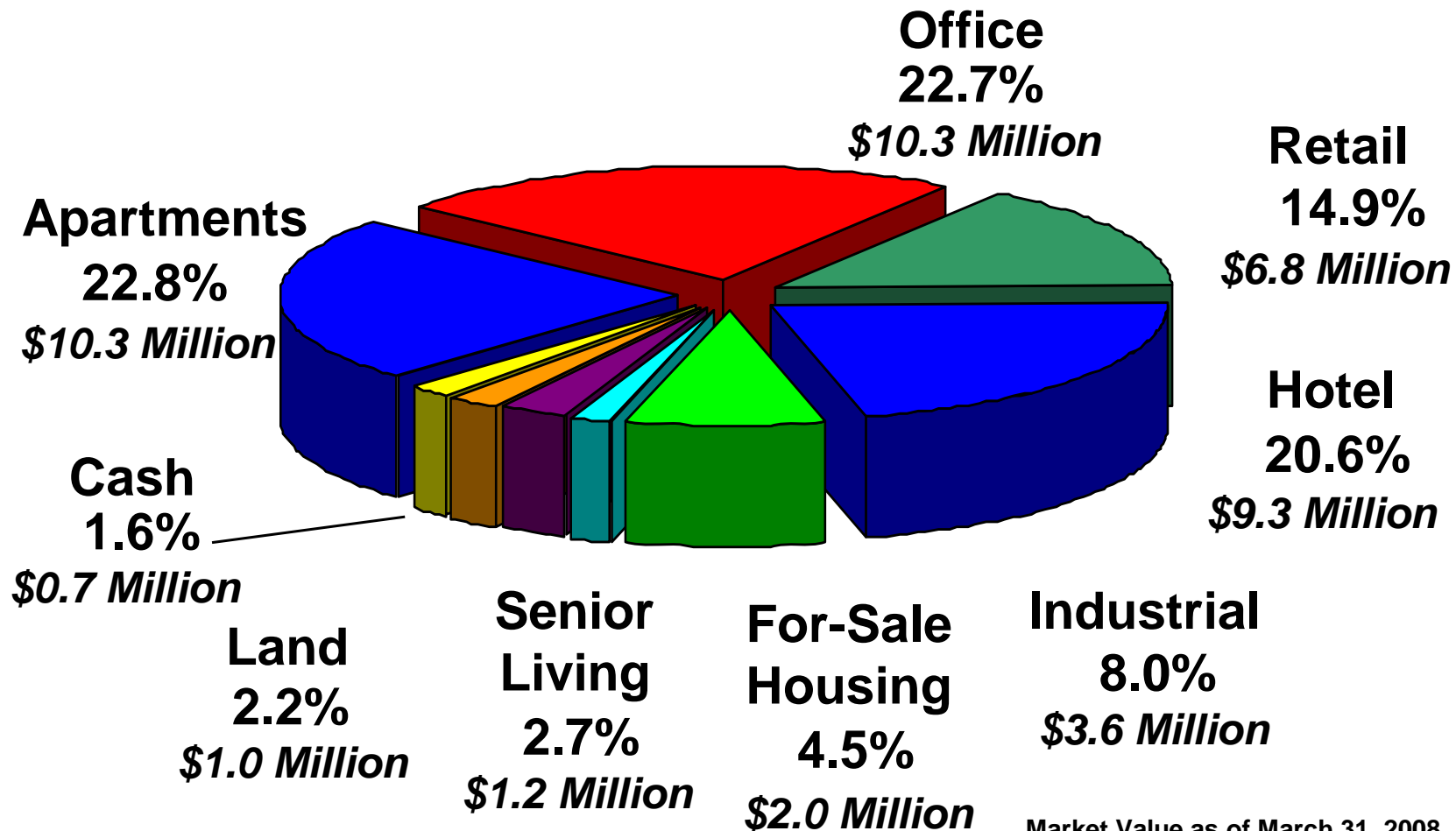


Market Value as of March 31, 2008



Real Estate

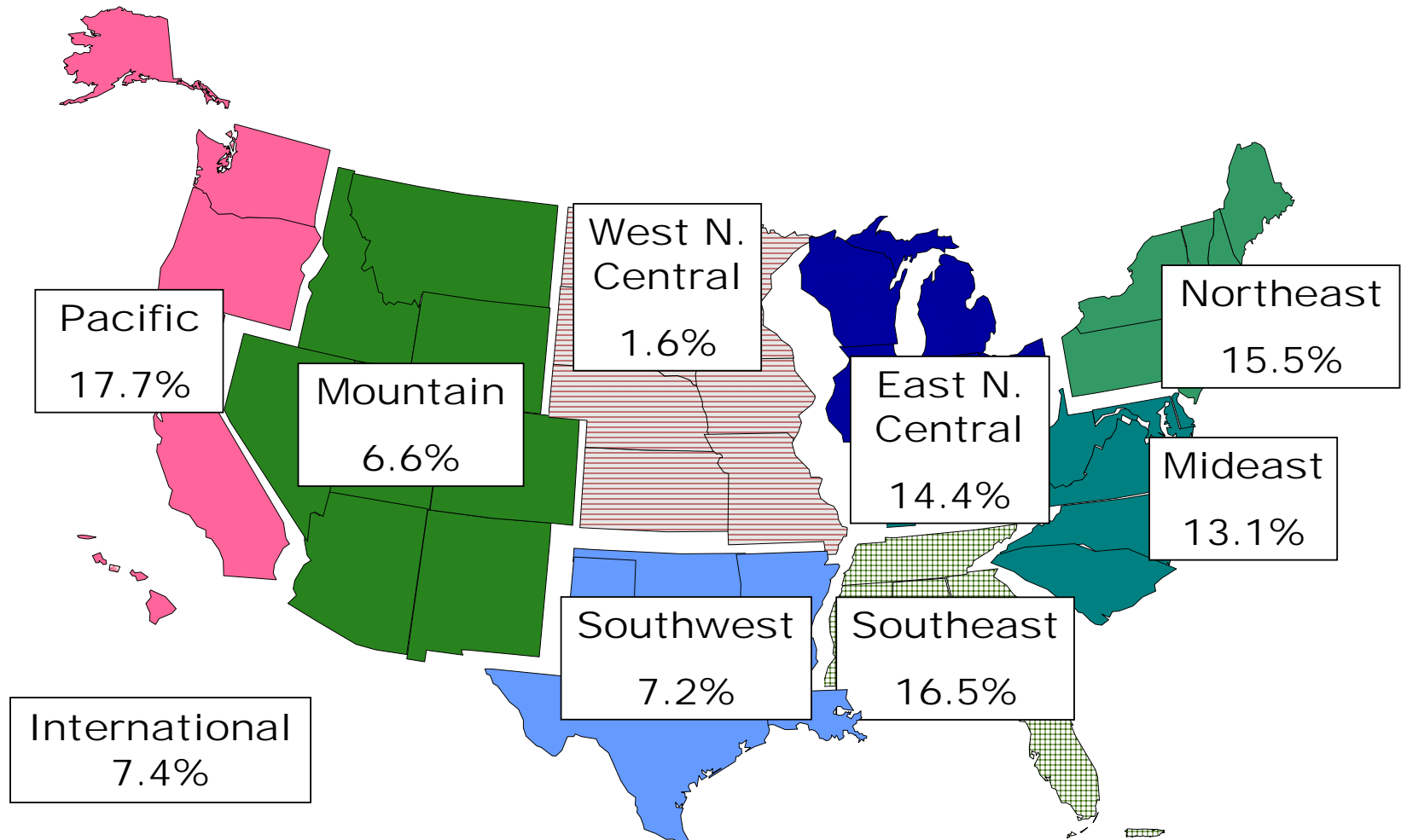
\$45.2 Million



Market Value as of March 31, 2008



Real Estate Investments

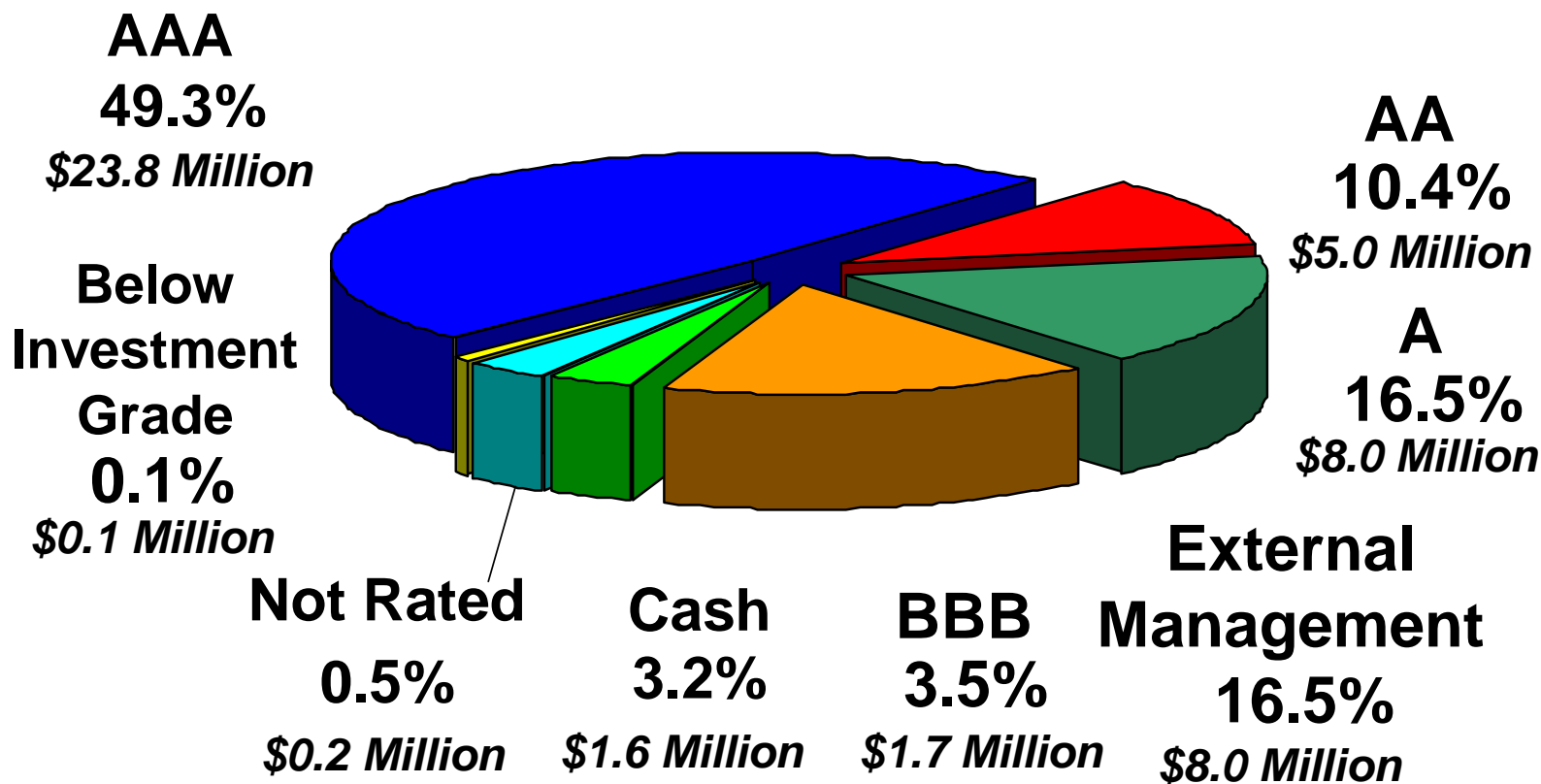


Geographic regions defined by NCREIF, whose property index composition is: Pacific 29.0%, Mountain 5.7%, West N. Central 1.9%, Southwest 8.6%, East N. Central 8.0%, Southeast 12.8%, Northeast 21.2%, Mideast 12.8%



Government and Corporate Bonds

\$48.4 Million





Benefits of Diversification





Annual Total Returns of Key Asset Classes 1987 - 2007

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	
Best	Small Value Stocks 29.47%	Large Growth Stocks 36.40%	U.S. Bonds 8.96%	Small Growth Stocks 51.18%	Small Value Stocks 29.15%	Foreign Stocks 32.57%	Foreign Stocks 7.78%	Large Growth Stocks 38.13%	Large Growth Stocks 23.97%	Large Growth Stocks 36.52%	Large Growth Stocks 42.16%	Small Growth Stocks 43.09%	Small Value Stocks 22.83%	Small Value Stocks 14.02%	U.S. Bonds 10.26%	Small Growth Stocks 48.54%	Small Value Stocks 22.25%	Foreign Stocks 13.54%	Foreign Stocks 26.34%	Foreign Stocks 11.17%	Best
	Foreign Stocks 28.26%	Large Stocks 31.69%	Cash 7.81%	Small Stocks 46.05%	Small Stocks 18.42%	Small Value Stocks 23.86%	Cash 3.90%	Large Stocks 37.58%	Large Stocks 22.96%	Large Stocks 33.36%	Large Stocks 28.58%	Large Growth Stocks 28.25%	U.S. Bonds 11.63%	U.S. Bonds 8.44%	Cash 1.65%	Small Stocks 47.25%	Foreign Stocks 20.25%	Large Value Stocks 6.33%	Small Value Stocks 23.48%	Large Growth Stocks 9.13%	
	Small Stocks 24.89%	Large Value Stocks 26.13%	Large Growth Stocks 0.20%	Small Value Stocks 41.70%	Large Value Stocks 10.52%	Small Stocks 18.89%	Large Growth Stocks 3.14%	Large Value Stocks 36.99%	Large Value Stocks 22.00%	Small Value Stocks 31.78%	Foreign Stocks 20.00%	Foreign Stocks 26.96%	Large Value Stocks 6.08%	Cash 3.83%	Small Value Stocks -11.42%	Small Value Stocks 46.03%	Small Stocks 18.33%	Large Stocks 4.91%	Large Value Stocks 20.80%	Small Growth Stocks 7.05%	
	Large Value Stocks 21.67%	Small Growth Stocks 20.16%	Large Stocks -3.11%	Large Growth Stocks 38.37%	Small Growth Stocks 7.77%	Large Value Stocks 18.61%	Large Stocks 1.32%	Small Growth Stocks 31.04%	Small Value Stocks 21.37%	Large Value Stocks 29.98%	Large Value Stocks 14.69%	Small Stocks 21.26%	Cash 5.89%	Small Stocks 2.49%	Foreign Stocks -15.66%	Foreign Stocks 38.59%	Large Value Stocks 15.71%	Small Value Stocks 4.71%	Small Stocks 18.37%	U.S. Bonds 6.97%	
	Small Growth Stocks 20.38%	Small Stocks 16.25%	Large Value Stocks -6.85%	Large Stocks 30.47%	Large Stocks 7.62%	Small Growth Stocks 13.37%	Large Value Stocks -0.64%	Small Stocks 28.44%	Small Stocks 16.53%	Small Stocks 22.36%	U.S. Bonds 8.70%	Large Stocks 21.04%	Small Stocks -3.02%	Small Growth Stocks -9.23%	Large Value Stocks -19.99%	Large Value Stocks 31.78%	Small Growth Stocks 14.31%	Small Stocks 4.55%	Large Stocks 15.80%	Large Stocks 5.49%	
	Large Stocks 16.61%	U.S. Bonds 14.53%	Small Growth Stocks -17.42%	Large Value Stocks 22.56%	U.S. Bonds 7.40%	Large Stocks 10.08%	Small Value Stocks -1.55%	Small Value Stocks 25.75%	Small Growth Stocks 11.32%	Small Growth Stocks 12.93%	Cash 4.86%	Large Value Stocks 12.72%	Large Stocks -9.11%	Large Value Stocks -11.69%	Small Stocks -20.48%	Large Stocks 28.68%	Large Stocks 10.88%	Small Growth Stocks 4.15%	Small Growth Stocks 13.35%	Cash 4.74%	
	Large Growth Stocks 11.95%	Small Value Stocks 12.43%	Small Stocks -19.50%	U.S. Bonds 16.00%	Large Growth Stocks 5.06%	U.S. Bonds 9.75%	Small Stocks -1.81%	U.S. Bonds 18.46%	Foreign Stocks 6.05%	U.S. Bonds 9.64%	Small Growth Stocks 1.23%	Cash 4.68%	Foreign Stocks 13.96%	Large Stocks 11.87%	Large Stocks 21.26%	Large Growth Stocks 25.66%	Large Growth Stocks 6.13%	Large Growth Stocks 3.46%	Large Growth Stocks 11.01%	Large Value Stocks 1.99%	
	U.S. Bonds 7.89%	Foreign Stocks 10.53%	Small Value Stocks -21.77%	Foreign Stocks 12.14%	Cash 3.51%	Cash 2.90%	Small Growth Stocks -2.44%	Foreign Stocks 11.21%	Cash 5.21%	Cash 5.26%	Small Stocks -2.55%	U.S. Bonds -0.82%	Large Growth Stocks -22.08%	Large Growth Stocks -12.75%	Large Growth Stocks -22.77%	U.S. Bonds 4.10%	U.S. Bonds 4.34%	Cash 2.98%	Cash 4.75%	Small Stocks -1.57%	

Source: Standard & Poor's Micropal. ■ Large Stocks are represented by the S&P 500; ■ Large Growth Stocks are represented by S&P 500 Growth Index; ■ Large Value Stocks are represented by the S&P 500 Value Index; ■ Small Stocks are represented by the Russell 2000 Index; ■ Small Growth Stocks are represented by the Russell 2000 Growth Index; ■ Small Value Stocks are represented by the Russell 2000 Value Index; ■ Foreign Stocks are represented by the MSCI EAFE Index; ■ U.S. Bonds are represented by the Lehman Brothers Aggregate Bond Index; and ■ Cash is represented by 30-day T-Bills.



Disclaimer



This presentation was given solely for the purpose of explaining the structure and investment process for the State of Michigan Retirement Systems. It should not be interpreted in any way as financial advice.